

women have undergone FGM, and each year another 4–5 million are thought to be at risk of this human right violation. The aim of this study was to evaluate the medical complications of this procedure in order to attract healthcare professionals' attention to this problem.

Methods: This cross-sectional study has been performed on more than 340 women undergo this procedure in south of Iran during 2004–2007. Demographic data and complications of FGM in each woman have been gathered carefully by interviews, history taking and physical examinations in a few women.

Results: The mean age of participants were 23 ± 4 y/o and 84% married. All of them forced to undergone FGM by their parents at mean age of 3.3 y/o. The result of this study demonstrates different immediate and delayed complications. 57% of the interviewed women had experienced significant immediate complications such as bleeding, shock, wound infection and swelling. Delayed complications were reported in 32% of these women reported as painful and difficult menstruation, pelvic infections, urinary tract infections, massive hemorrhage after delivery and obstructed and prolonged labor. Terrible life-long psychological trauma should be added to these physical complications that presented in all of women. None of these women reported experience of orgasm during their sexual life. In addition, prevalence of HIV/AIDS was significantly higher in these women ($P < .0001$). Fortunately no mortality has been reported in these women in period of study.

Conclusion: Findings of this study highlight the need for heightened awareness of issues around FGM so as to better provide adequate physical and psychological support to affected women. Different kinds of interventions should be considered, starting with the development of informative campaigns, training of health workers, institution of a toll-free number, international cooperation programs and the responsibility of the family where the crime is committed. The result of this study discusses the possible relationship in terms of health risk between HIV/AIDS and FGM in the south of Iran and calls for more concerted efforts, including further research in order to address this potential risk. Particularly, health care professionals' can play a key role in eliminating FGM, as a violation of a person's fundamental rights to physical and mental integrity of women and girls.

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68.037

Childhood Infections and Vaccination History as a Risk of Multiple Sclerosis

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Background: Multiple sclerosis (MS) is an inflammatory and autoimmune demyelinating disease of the CNS and one of the most common neurological disorders among young adults. The etiology and pathogenesis of MS has not been fully defined but it has been hypothesized to be the result from an aberrant immune response possibly triggered by delayed exposure to a common childhood infection. The aim of this study was to analyze the role of childhood infections and vaccination history in patients with MS.

Methods: This case-control study conducted on 400 cases with definite MS according to McDonald criteria, in whom onset symptoms occurred up to 2 years prior to the interview. An equal number of controls, individually matched by sex, age and area of residence, were included, too. Demographic data and past medical history of both case and control group were recorded through a face to face interview

Results: The total number of some common childhood viral infections including measles, rubella, chickenpox, and mumps at age ≤ 7 years was significantly higher in MS cases than in controls. (OR = 1.8, 95% CI 1.4–2.5) Furthermore, we did find a relationship between mumps after 15 years of age (OR = 2.3, 95% CI 1.2–4.3) or measles after 15 years of age (OR = 2.8, 95% CI 0.8–9.1) and MS. Our results demonstrated that individuals who suffered from infectious mononucleosis, a marker of late infection with the Epstein-Barr virus, have an increased risk of MS. Concerning vaccinations, no statistically significant differences were found between groups. However, the age at which MS patients were immunized against poliomyelitis was significantly higher than the corresponding age for controls (15.8 ± 8.9 years, $P < 0.01$). In addition, the risk of MS was not associated with birth order or social class or other demographic data.

Conclusion: In conclusion, our findings suggest that measles, rubella, chickenpox, and mumps at age ≤ 7 years and measles and mumps ≤ 15 years and individuals with mononucleosis infectious have higher risk of MS. These findings support the hypothesis that individuals who suffered from childhood infectious disease have an increased risk of MS although further studies seem to be needed.

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68.038

World Rabies Day: A collaborative initiative to...Make Rabies History!

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Background: Although the word alone evokes a highly charged response, rabies remains a severely neglected disease. The continuing loss of lives to rabies infection is

entirely preventable and directly related to economic and educational disparity.

Methods: The World Rabies Day initiative arose from a group of rabies prevention professionals who built partnerships with the World Health Organization, the World Organization for Animal Health (OIE), the Centers for Disease Control and Prevention, Pasteur Institute, and other organizations. This initiative advocates for improving the health of the whole population, human and animal, - a 'One Medicine Approach' - by raising awareness about the need to control rabies in the main global animal reservoir, the domestic dog, and prevent human rabies through education and appropriate medical prophylaxis

Results: During the inaugural year, at least 74 countries participated through a wide variety of events including vaccination clinics, educational seminars, media outreach, museum and zoo exhibits, parades, festivals, dances, puppet shows, runs, and dog walks. Summary data indicates that nearly 400,000 people participated in a World Rabies Day event, over 600,000 animal vaccinations were administered and more than 54 million people were educated worldwide. In some countries, rabies experts convened to discuss goals and plans for rabies prevention and control, with several initiating a national program. Veterinary colleges joined forces towards this effort, with activities at 24 in the US, 15 in India, 5 in Indonesia, and several in Mexico, Peru, The Philippines and other countries

Conclusions: The first World Rabies Day was a major achievement for the rabies prevention community. These efforts are envisioned to be part of comprehensive human and animal health delivery that would develop and augment public health and veterinary infrastructure in regions of greatest need. Now is the time for 'Working Together to Make Rabies History!'

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Epidemiology of Bacterial Infections (Poster Presentation)

69.001

Investigation of Common Microorganisms in Patients with Brain Abscess

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Background: Brain abscess is a Focal collection within the brain parenchyma. Despite the technological advancements in diagnostic and neurosurgical procedures, brain abscess continues to remain a potentially fatal central nervous system infection.

Methods: In a descriptive study, we evaluated 30 cases of brain abscess were treated at Loghman Hakim hospital from March 2003 to December 2006.

Results and conclusion: Out of 30 patients 20 (66.7%) were males and 10 (33.3%) females. Mean age was 32 years (range 8 years to 70 years). There was a peak at 20 to 29 years. Predisposing factors were identified in 20 (66.7%) patients. The common predisposing factors were otic infection (26.7%), I.V. drug use (16.7%), neurosurgery (13.3%)

and penetrating head trauma (6.7%). The most frequent presenting signs and symptoms were headache (73.3%), nausea and vomiting (70%), fever (50%), focal neurologic defects (50%) and mental status changes (46.7%). Triad of fever, headache and focal deficit were seen in 20% of patients. Solitary abscess was found in 70% of the cases while in 30% of the cases multiple abscess were found. Frontal lobe and parietal lobe were the commonest sites involved.

Cultures were found positive for microorganism in 66.7% of the cases. 45% of which were aerobic and 55% anaerobic bacteria.

Staphylococci (30%), peptostreptococcus (25%), bac-teroids (20%) and streptococcus (15%), were the commonest isolates.

Third generation cephalosporins and metronidazole and vancomycin were used most often for empirical therapy. Burr hole aspiration was done in only 50% of the cases. Overall mortality was 23.3% in this series. Mortality rate was 33.3% in patients with medical treatment.

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69.002

Incidence of Brucellosis in Shazand County, Iran, 2006

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Background: Brucellosis is a major zoonosis with a world-wide distribution and represents a serious public health problem in many developing countries. The aim of this study was to figure out the annual Incidence rate of Brucellosis in Shazand County.

Materials and Methods: All patients living in Shazand county, with a clinical picture compatible with Brucellosis plus to positive laboratory results were included in this study. Positive laboratory results were defined by the Ministry of Health as Wright agglutination titer $\geq 1/80$ and 2ME titer $\geq 1/40$. A questionnaire including Demographic data, symptoms and onset of the problem were filled in by every patient. The data was analyzed by means of SPSS software version 14.

Results: In this questionnaire based study, out of the 145 patients, who participated in this study, 95 were male and 50 were female. 72 patients were above 40 years old, 73 had less than 40 years of age and among them 3 people were under 10 year old (2%). 40% of patients had presented during summer months. Incidence rate was 13.1 per 10000 population.

Conclusion: The incidence rate in Shazand County was 13.1 per 10000 population and thus has not changed much compared to a year before (13/10000). The incidence rate in Markazi state, where our county is located, has been 7.3 per 10000 population, so the prevalence of Brucellosis in Shazand county has been much higher than expected. Unfortunately in IRAN there is no annual rate available, we just know that it had been 24 per 10000 about 8 years ago. Incidence of Brucellosis in European countries is far less than that (0.01/100000) which indicates the need for further preventive measures for vaccination of the cattle